Appl. No. 10/821,478
Amdt. dated June 21, 2007
Reply to Office Action of March 21, 2007 and the advisory action mailed June 12, 2007

Amendments to the Claims:

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supporting a slider, said flexure comprising:

This listing of claims will replace all prior versions, and listings of claims in the application:

(Original) A suspension assembly including a load beam and a flexure

a wiring layer laminated on said metal layer in said second supporting area

a first supporting area connected to said load beam on a leading end side;

Listing of Claims:

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- 4 a second supporting area connected to said load beam on a supporting end side; 5 a flexure tongue provided with a supporting area of said slider, a dimple contact 6 point, and a leading edge; 7 a metal layer including: a first loop spring structure extending from said first supporting area so as 9 to support said flexure tongue and having a parameter for giving stiffness to said flexure 10 tongue; and 11 a second loop spring structure extending from said second supporting area 12 so as to support said flexure tongue and having a parameter for giving stiffness to said 13 flexure tongue, a value of said parameter being selected in such a manner that said second 14 loop spring structure gives a stiffness smaller than the stiffness said first loop spring 15 structure gives to said flexure tongue; and
- 1 2. (Original) The suspension assembly according to claim 1, wherein said
 2 first loop spring structure and said second loop spring structure constitute a pair of strip-shaped
 3 arms each formed of the metal layer.

and extendedly branching from said second supporting area toward said slider.

1 3. (Original) The suspension assembly according to claim 2, wherein each of
2 said parameters of said first and second loop spring structures is selected as one or a combination

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- of two or more from the group consisting of a material, a path length, a thickness, a width, and a
 path shape of the strip-shaped arms formed of said metal layer.
- 1 4. (Original) The suspension assembly according to claim 2, wherein said
 2 metal layer is a stainless steel having a thickness ranging from about 0.015 mm to 0.025 mm.
- 1 5. (Original) The suspension assembly according to claim 4, wherein the path length of said second loop spring structure is about 1.2 times or more as long as the path length of said first loop spring structure.
- 1 6. (Original) The suspension assembly according to claim 4, wherein either
 2 the width of said first loop spring structure or the width of said second loop spring structure is
 3 about 0.150 mm or less.
- 1 7. (Original) The suspension assembly according to claim 4, wherein said
 2 first supporting area is connected to said load beam at a first fixing point passing through a
 3 center line of said load beam, said second supporting area is connected to said load beam at a
 4 second fixing point passing through a center line of said load beam, the pair of strip-shaped arms
 5 constituting said first loop spring structure extends from an area near said first fixing point in
 6 said first supporting area, and the pair of strip-shaped arms constituting said second loop spring
 7 structure extends from an area near said second fixing point in said second supporting area.
- 8. (Original) The suspension assembly according to claim 7, wherein a
 distance from said dimple contact point to said second fixing point is about 1.5 times or more as
 long as a distance from said first fixing point to said dimple contact point.
- 1 9. (Original) The suspension assembly according to claim 7, wherein the distance from said first fixing point to said dimple contact point is about 1.25 mm or less.

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- 1 10 (Original) The suspension assembly according to claim 1, wherein said 2 first loop spring structure and said second loop spring structure support said flexure tongue at a 3 point on a side of the leading edge in relation to a center of the supporting area of said slider.
- 1 11 (Original) The suspension assembly according to claim 1, wherein said 2 first loop spring structure and said second loop spring structure are provided with a common 3 portion and said common portion, instead of said first loop spring structure and said second loop 4 spring structure, supports said flexure tongue.
- 12 1 (Original) The suspension assembly according to claim 1, wherein said 2 wiring layer includes a copper layer and a dielectric layer.
 - 13 (Original) The suspension assembly according to claim 12, wherein a thickness of said metal layer ranges from about 0.015 mm to 0.025 mm, a thickness of said dielectric layer ranges from about 0.005 mm to 0.020 mm, and a thickness of said copper layer ranges from about 0.005 mm to 0.020 mm.
- 1 14 (Original) The suspension assembly according to claim 1, wherein said 2 dimple contact point is given as a contact portion between a dimple formed on said load beam 3 and said flexure tongue.
- 1 15. (Original) The suspension assembly according to claim 1, wherein said 2 dimple contact point is given as a contact portion between a dimple formed on said flexure and 3 said load beam
- 1 16 (Original) The suspension assembly according to claim 1 further 2 comprising a limiter, formed of part of said metal layer, extending from said flexure tongue.
- 1 17. (Original) A suspension assembly including a load beam and a flexure 2 connected to said load beam and supporting a slider, said flexure comprising: 3
 - a flexure tongue provided with a supporting area of said slider.

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a first spring structure supporting a first supporting area connected to said load
beam on a leading end side and said flexure tongue in such a manner as to extend from said first
supporting area for giving a dominant stiffness to said flexure tongue;

a second spring structure supporting a second supporting area connected to said load beam on a supporting end side and said flexure tongue in such a manner as to extend from said second supporting area for giving an auxiliary stiffness to said flexure tongue; and

a wiring layer laminated on said metal layer in said second supporting area and extendedly branching from said second supporting area toward said slider.

- 1 18. (Original) The suspension assembly according to claim 17, wherein a
 2 stiffness given by said second spring structure to said flexure tongue is about 40% or less of a
 3 stiffness given by said first spring structure and said second spring structure to said flexure
 4 tongue.
- 19. (Original) The suspension assembly according to claim 18, wherein said
 2 stiffness is a pitch stiffness or a peel stiffness of said flexure tongue.
- 1 20-22. (Canceled)
- 1 23. (Original) A rotary disk storage device, comprising:
- 2 a rotary disk;

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- a head reading and writing data from and to said rotary disk, or either reading or
 writing data from or to said rotary disk:
- 5 a slider mounted with said head;
 - a suspension assembly supporting said slider; and
- an actuator mechanism supporting said suspension assembly, said suspension
 assembly being one as recited in claim 1.
- 1 24. (Original) The rotary disk storage device according to claim 23, further comprising a ramp in which said slider is retracted.

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- 25. (Original) The rotary disk storage device according to claim 23, wherein
 said actuator mechanism turns about a pivot shaft above a surface of said rotary disk.
- 1 26. (Original) A rotary disk storage device, comprising:

2 a rotary disk;

- a head reading and writing data from and to said rotary disk, or either reading or
 writing data from or to said rotary disk;
- 5 a slider mounted with said head;
- 6 a suspension assembly supporting said slider; and
 - an actuator mechanism supporting said suspension assembly, said suspension
 assembly being one as recited in claim 17.
 - 1 27. (Original) The rotary disk storage device according to claim 26, further 2 comprising a ramp in which said slider is retracted.
 - 28. (Original) The rotary disk storage device according to claim 26, wherein
 said actuator mechanism turns about a pivot shaft above a surface of said rotary disk.
 - 1 29-31. (Canceled)